Title: System and Method for Providing Event Hysteresis in Network Management Systems

REMARKS

Claims 1-3, 5, 7-11, 13, 15-19, 21, 23-27, 29, 31-35, 37, 39, 40 and 41-50 are pending. Claims 1, 9, 17, 25, and 33 are herein amended, and claims 41-50 are new.

Claims 1-3, 5, 7-11, 13, 15-19, 21, 23-27, 29, 31 and 32 were rejected under 35 U.S.C. \$103(a) as being unpatentable over U.S. Patent 6,006,016 (Faigon) in further view of U.S. Patent 6,513,129 (Tentij). In addition, claims 33-35, 37, 39, and 40 were rejected under 35 U.S.C. \$103(a) as being unpatentable over Faigon in further view of Tentij in further view of U.S. Patent 6,414,595 (Scrandis).

The Applicants traverse these rejections. In addition, the Applicants have amended to more distinctly define the claimed invention.

The Applicants' claims define methods and systems for "managing an event toggling between first and second event states." In more detail, each of the Applicants' independent claims recites, in part, reporting "said event" only after its state is maintained for a predetermined amount of time. In addition, the claims now further recite listing said event and a last state change time of said event in a hysteresis table (if not already in the table), and if said last state change time of said event plus said predetermined amount of time is not less than current time, then said event is deemed unstable and remains listed in said hysteresis table. On the other hand, if said last state change time plus said predetermined amount of time is less than the current time, then said event is deemed stable and is removed from said hysteresis table. In some cases, the method may further include sending a set notification prior to said reporting, wherein said reporting consists of sending a clear notification (such as in new claims 41, 43, 45, 47, and 49). In other cases, the hysteresis table includes a plurality of events and corresponding last state change times, and said determining is repeated periodically to remove stable events from said hysteresis table (such as in new claims 42, 44, 46, 48, and 50). Note that listing said event in the

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table (as well as removing said event from the table) is independent of the reporting function. For instance, a newly listed event can be reported at time of listing (e.g., immediate set notification) or at some later time (e.g., set notification after set state has been maintained for a period of time). Likewise, an event can be removed from the table (because it is stable), but not necessarily reported (e.g., because it is an active alarm that has already been reported).

The Applicants have reviewed Faigon, Tentij and Scrandis and can find no occurrence where they, individually or in combination, disclose or suggest the use of a hysteresis table as now variously recited in the Applicants' claims. As such, the Applicants respectfully request the Examiner's reconsideration and withdrawal of these rejections.

For purposes of preserving the Applicants' rights with respect to any appeal and/or one or more continuation applications that may include claims having scope similar to or broader than the claim scope prior to this amendment, the Applicants wish to respond to a number of points made in the most recent Final Office Action.

Firstly, the Final Office Action does not address the Applicants argument with respect to Faigon not only failing to disclose *reporting* an event as having a given state only after that state is maintained for a predetermined amount of time, but also failing to disclose *determining* if an event maintains a given state for a predetermined amount of time. Counting the number of alert signals during the so-called event threshold does not amount to determining if any one event maintains a given state for a predetermined amount of time, as variously claimed by the Applicants. The Applicants respectfully request clarification

Secondly, the Examiner maintained the previous rejections based on Faigon and Tentij, and disagrees with the Applicants' arguments with respect to improper Filing Date: December 11, 2003

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combination. The Applicants reaffirm their position with respect to the improper combination of Faigon and Tentij, for at least the following reasons. As previously explained, Faigon's fault correlator already addresses suppression of "temporary or short-term" fault problems (col. 9, lines 15-22; see also col. 1, lines 51-55 which demonstrates Faigon's objective to address problems associated with "transient faults"). In response to this argument previously made by the Applicants, the Examiner suggested that Faigon does not provide specific methods for handling transient faults. To this end, the Applicants note that Faigon does provide specific methods for handling transient faults (referred to by Faigon as "temporary" or "short-term" problems) by using an "update mode field 505" that indicates either "set" or "increment" (e.g., col. 9, lines 34-40). Faigon uses "set" or "increment" as "state change operators" (col. 3, lines 37-38). As further explained by Faigon:

"... a "set" change is used for longterm problems while short-term problems require a "increment" update to reflect an accumulated effect. "Set" is an absolute change in state, while an increment is a value indicating an addition to the current severity state. The next field is a maximum limit field 506 which is used in the case of the "increment" update. This indicates a maximum limit for the determined severity level. In "set" type messages, the maximum limit field is null or 0. Finally, an aging interval field 507 is used for indicating, in seconds, whether the effect of this update should be undone. This is applicable only for increment types of updates. Again, for "set" types of updates, the field will be undefined."

Thus, Faigon addresses transient faults by specifying the "update mode filed 505" to be of the "increment" type, so that a severity state can be assigned to transient faults (also referred to as "increment arcs" by Faigon, where "arcs" are state updates). This count-based technique, which is further detailed for instance by Faigon's figures 7a-b and the corresponding description, allows management of transient faults without monitoring state duration (e.g., lower severity transient faults can be ignored, while more sever transient faults can be acted upon). Thus, the Applicants reaffirm their previous position

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that it is not clear why one skilled in the art would have been motivated to modify Faigon

by Tentij, to achieve benefits already provided by Faigon (i.e., Faigon discloses

suppression of transient faults). Such a modification would seem likely only after having

had the benefit of the Applicants' disclosure, which would amount to inappropriate

hindsight.

Likewise, the Applicants reaffirm their position that modifying Faigon by Tentij

would involve a substantial change in the basic principle under which the Faigon fault

correlator was designed to operate. Specifically, the underlying principle of operation of

Faigon is event counting in the context of a distributed fault correlator (e.g., col. 2, lines 40-42; figures 3 and 4). Integrating a state-duration based scheme into this counting-based

scheme would require a change in the basic principle of Faigon's operation.

Likewise, the Applicants reaffirm their position that Faigon teaches away from

duration-based fault correlation techniques (by disclosing quantity based fault correlation

and suppression techniques that employ severity rating and aging schemes).

Favorable action is solicited. The Examiner is kindly invited to telephone

Applicants' attorney (603-668-6560) to facilitate prosecution of this application.

RESPECTFULLY SUBMITTED,

Date: August 4, 2009

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